U.S. Fish & Wildlife Service

Fish Lines

Region 3 - Great Lakes/Big Rivers

Leadership in Conserving, Enhancing, and Restoring Aquatic Ecosystems

Cooperation with Native Americans

(Selected articles from 2004 and 2005 issues of *Fish Lines*)

To view other issues of "Fish Lines", see our Regional website at: (http://www.fws.gov/midwest/Fisheries/)

Coordination with Tribal Governments

The area of the United States encompassed by the Great Lakes – Big Rivers Region of the U. S. Fish and Wildlife Service is home to 35 federally recognized tribes, bands, and communities, and 3 intertribal organizations. The fish, wildlife and natural resource interests of Native Americans in our Region cover large areas included under the Treaties of 1836, 1837, 1842 and 1854. These lands and waters contain a great diversity of plant and animal life managed under authorities of tribal governments and states.

The Federal Government, Department of Interior, and Fish and Wildlife Service, have trust responsibilities to assist Native Americans in protecting, conserving and utilizing their reserved, treaty guaranteed, or statutorily identified trust assets. The Service adopted a Native American Policy in 1994 with the express purpose to articulate the general principles that will guide the service's government-to-government relationship to Native American governments in the conservation of fish and wildlife resources.

For the Service's Region 3 Fisheries Program, the most important aspects of fulfilling trust responsibilities to tribes are to provide consultation, technical assistance, cooperative partnerships and training opportunities to Native American fish and wildlife professionals, consistent with the principles of tribal self-determination and self-governance.

Effective and efficient coordination with tribal natural resource programs is therefore one of our most important goals. We will hold regular coordination meetings with tribes and continue the more frequent communication that occurs between tribes, our Fishery Resources Offices, and National Fish Hatcheries, in planning and implementing conservation activities.

In order to establish the most direct and efficient lines of communication between tribes and the Service's Fishery Program in this Region, we have assigned each of our Fishery Resources Offices the lead responsibility for supporting the needs of several recognized Native American groups in the Great Lakes – Big Rivers Region, as outlined here.

-USFWS

Alpena FRO staff set experimental gill nets as part of the fishery independent lake whitefish survey in 1836 Treaty waters of Northern Lake Huron.

The Alpena FRO is responsible for working with:

Chippewa Ottawa Resource Authority

Bay Mills Indian Community
Match-E-Be-Nash-She-Wish Band of Potawatomi Indians of Michigan
Nottawaseppi Huron Band of Potawatomi
Pokagon Band of Potawatomi Indians
Saginaw Chippewa Indian Tribe of Michigan
Sault Ste. Marie Tribe of Chippewa Indians

For additional information, see the Region 3 Fisheries Operational Plan at:
http://www.fws.gov/midwest/Fisheries/library/R3_Operational%20Plan.pdf

-USFWS

Ashland FRO and Fond du Lac Band staff are ready for a lake sturgeon assessment on the St. Louis River. Fin samples are taken from captured fish for genetic analysis.

-USFWS

Tribal Game Warden Matt O'Claire releases a sora rail. The Bad River Band of Lake Superior Chippewa Wildlife Department completed the second year of a 3 year study to assess sora, Virginia, and yellow rail populations in the wild rice dominated wetlands of the Kakagon/Bad River wetland complex.

-USFWS

White Earth Department of Natural Resources Biologist Will Bement holds a lake sturgeon that was caught in Round Lake on the White Earth Reservation. Lake sturgeon have been re-introduced on the reservation by the White Earth DNR, Fish and Wildlife Service, and others.

The Ashland FRO is responsible for working with:

Great Lakes Indian Fish and Wildlife Commission
1854 Authority

Bad River Band of Lake Superior Tribe of Chippewa Indians
Bois Forte (Nett Lake) Lake Superior Band of Chippewa Indians
Fond du Lac (Lake Superior) Band of Chippewa Indians
Grand Portage (Lake Superior) Band of Chippewa Indians
Keweenaw Bay Indian Community
Lac Courte Orielles Band
Lac du Flambeau Band of Lake Superior Chippewa Indians
Lac Vieux Desert Band of Lake Superior Chippewa Indians
Leech Lake Band of Ojibwe
Mille Lacs Band of Ojibwe
Red Cliff Band of Lake Superior Chippewa Indians
Red Lake Band of Chippewa Indians
St. Croix Chippewa Indians of Wisconsin
Sakaogon Chippewa (Mole Lake) Community of Wisconsin

The Green Bay FRO is responsible for working with:

Forest County Potawatomi Community
Grand Traverse Bay Band of Ottawa and Chippewa Indians
Hannahville Indian Community
Little River Band of Ottawa Indians
Little Traverse Bay Bands of Odawa Indians
Mohican Nation Stockbridge-Munsee Band
Oneida Tribe of Indians of Wisconsin

The LaCrosse FRO is responsible for working with:

Ho-Chunk Nation
Lower Sioux Indian Community in Minnesota
Menominee Indian Tribe of Wisconsin
Prairie Island Indian Community
Sac and Fox Tribe of the Mississippi in Iowa
Shakopee Mdewakanton Sioux Community
Upper Sioux Community of Minnesota
White Earth Band of Chippewa

List of Acronyms

DNR- Department of Natural Resources
FHC- Fish Health Center
FRO- Fishery Resources Office
NFH- National Fish Hatchery
NWR- National Wildlife Refuge

Lake Superior Brook Trout Assessment for the Keweenaw Bay Indian Community

Glenn Miller and Frank Stone conducted two brook trout assessments along the shore of Keweenaw Bay and Huron Bay at the Keweenaw Bay Indian Community. The objectives of this project were to detect changes in abundance of wild and stocked coaster brook trout, describe the biological characteristics of coasters (length, weight, and age), collect tissue samples for genetic analysis (for source population assignment), and describe the abundance of other salmon and trout species within the project area.

Conducted after sunset, the survey used an electrofishing boat. During four nights of work, Miller and Stone sampled approximately 17 miles of shore in two trips. While only brook trout were to be collected during these surveys, they observed other fish species and recorded them as few, common, or abundant. This survey is part of a Lake Superior plan to restore coaster brook trout in Lake Superior. The data collected from these ongoing surveys will help tribal and Fish and Wildlife Service resource managers develop long term management plans for this important resource.
Glenn Miller, Ashland FRO (Fiscal Year 2005; Vol.3 No. 9)

-USFWS

Populations of adult coaster brook trout are held in National Fish Hatcheries to provide fertilized eggs for various restoration programs in the Lake Superior watershed. Biologists are assessing locations to detect changes in the abundance of wild and stocked fish.

Ashland FRO Biologist Assists with Evaluation, Scoring of 2005 Tribal Grants

Frank Stone from the Ashland FRO participated on a six-member team to discuss the scoring process for the Fish and Wildlife Service's 2005 Tribal Wildlife Grants (TWG) and Tribal Landowner Incentive Program (TLIP). The team aimed to define problem areas in scoring submissions before the top ranked proposals were presented for national ranking. A total of 25 TWG and 3 TLIP proposals were submitted for regional review. All of the TLIP proposals were forwarded for the national review process. The average regional score for the TWG proposals was 70 points. Under the consensus of the team, the 16 projects that scored at or above this average were forwarded to the national review team for a competitive selection process among all seven regions.

Stone also assisted the Regional Tribal, Liaison John Leonard, in scoring all tribal grants submitted by tribes throughout the United States, reviewing 47 grant proposals (33 – TWG and 14 – TLIP).

Although the list of accepted grants has yet to be finalized, tribal resource programs throughout the United States will soon be receiving the financial help they need to initiate their programs. The TWG and TLIP programs will provide new funding opportunities to tribes for activities that protect and restore habitats that will benefit fish and wildlife species of tribal significance. These grant programs also support the efforts of tribal governments to develop or augment the capacity to manage, conserve, or protect fish and wildlife species of concern through the provision of additional funding and technical support.
Frank Stone, Ashland FRO (Fiscal Year 2005; Vol. 3 No. 9)

The **Tribal Wildlife Grant Program** supports federally recognized Indian tribes to develop and implement programs that benefit wildlife and their habitat, including non-game species on tribal lands. The Service has approximately $5.98 million available for this program in 2005 and will fund 28 of the 121 proposals submitted. These selected grants represent 28 tribes in 16 states.

The **Tribal Landowner Incentive Program** supports federally recognized Indian tribes to protect, restore, and manage habitat to benefit species at-risk, including federally listed endangered or threatened species, as well as proposed or candidate species on tribal lands. The Service has approximately $2.14 million available for this program in 2005 and will fund 17 of the 35 proposals submitted. These selected grants represent 17 tribes in 11 states.

Largemouth Bass Transferred to Lighthouse Pond for Tribal Fishery

Frank Stone from the Ashland FRO recently completed a fish transfer for the Keweenaw Bay Indian Community (KBIC). Using a boat electrofishing system and with the help of KBIC staff members Evelyn Ravindran and Gene Mensch, Stone collected 50 largemouth bass (12-16 inches) and transferred them from Sandy Lake into Lighthouse Pond. The KBIC provided a fish hauling tank complete with an aeration system that ensured the fish arrived at Lighthouse Pond in excellent condition.

The KBIC and Tribal Biologist Todd Warner are interested in developing Lighthouse Pond into a family-oriented largemouth bass fishery. Currently, the surrounding area is used for picnicking and numerous tribal activities, including a yearly Pow-Wow. Because of the proximity of the lakes to this recreation area, the KBIC has initiated management plans with the Fish and Wildlife Service and the Michigan DNR to enhance this fishery. Lighthouse Pond is subject to winter kill conditions and options for enhancing the angling potential are limited. The option now being developed is to manage the lake as a catch and release fishery for children and elders.

Frank Stone, Ashland FRO
(Fiscal Year 2005; Vol. 3 No. 8

-USFWS

Evelyn Ravindran from the Keweenaw Bay Indian Community releases largemouth bass into Lighthouse Pond to develop a family oriented fishery near a picnicking and meeting area.

Genoa NFH Assists Tribes in Fisheries Management Programs

Spring means more than having to get out the lawnmower again. At Genoa NFH, spring also means that fish distribution season collides with a number of different fish and mussel reproductive cycles. Through all of this, hatchery staff also cultured more than 27,000 coaster brook trout, rainbow trout and lake sturgeon to assist five Midwestern tribes with two restoration programs and three recreational fishing programs.

Lake sturgeon was historically important to Midwestern tribes, both culturally and as a food source, during the spring spawning migration. Through habitat restoration and restocking, lake sturgeon are making a comeback on two tribal waters where they have been absent for nearly 100 years. Dam construction was a major reason for sharp declines in sturgeon populations. Sturgeon use rivers as spawning and nursery habitat, and require access to these areas to reproduce successfully.

Coaster brook trout were once abundant on the south shore of Lake Superior, but as a result of habitat destruction, over-fishing and the introduction of invasive sea lampreys, entire stream populations of brook trout were extirpated. Genoa is currently stocking two different life stages of coaster brook trout for the Grand Portage reservation in Northern Minnesota to determine the optimum stocking size to maximize survival. The hatchery supplied surplus rainbow trout, initially being raised for the Department of Army, to three area tribes to increase recreational fishing opportunities on tribal waters. Fishery resources offices play a large role in acting as a liaison between the Fish and Wildlife Service and the tribes, and incorporate fishery management plans on all stocking requests to ensure sound biology.

Doug Aloisi, Genoa NFH
(Fiscal Year 2005; Vol. 3 No. 8)

Alpena FRO Assists Huron Potawatomi with Wildlife Management Planning

Biologist Ben Skarp, with the Huron Potawatomi Tribe in Southwest Michigan, contacted the Alpena FRO for assistance. Skarp received funds through the Fish and Wildlife Service's Tribal Wildlife Grant program to develop a tribal wildlife and habitat management plan for the Tribe. Project Leader Jerry McClain provided verbal guidance and electronic links to existing fish and wildlife management plans that will help Skarp develop his planning documents. Alpena FRO is Region 3's lead field station for assistance to the Huron Potawatomi Tribe and Skarp was given McClain's name by John Leonard, Region 3 Native American Coordinator.

Jerry McClain, Alpena FRO
(Fiscal Year 2005; Vol. 3 No. 8)

Lake Sturgeon Fin Clips Taken for Fish Health Analysis

Scott Yess from the La Crosse FRO traveled to Baudette, Minnesota, in April to collect 30 lake sturgeon fin clips for a fish health analysis, the first stage of the annual effort to restore lake sturgeon to the White Earth Reservation and the Red River watershed. A fisheries crew for the Minnesota DNR collected the 30 sturgeon from anglers and tagged the fish with Carlin tags in an effort to determine a population estimate. The fish were in a holding pen prior to tagging and fin clipping. Becky Lasee at the La Crosse FHC will test the fin clips for the Irido Virus. This test must be negative prior to transporting lake sturgeon eggs to Genoa NFH.

If the viral tests are negative, staff from the La Crosse FRO and White Earth DNR will assist Joe Hunter of Rainy River First Nations (Canada) with lake sturgeon spawning. The eggs will then be raised to fingerlings approximately 6 inches long at Genoa NFH and stocked on the White Earth Reservation.

Scott Yess, La Crosse FRO
(Fiscal Year 2005; Vol. 3 No. 7)

-USFWS

Scott Yess (left) from the La Crosse FRO works with Tom Heinrich, Minnesota DNR, to obtain a fin clip from a lake sturgeon to test for the irido virus. This test must be negative prior to transporting eggs to the Genoa NFH.

Ashland and La Crosse FROs Assist Great Lakes Indian Fish & Wildlife Commission with Spring Walleye Surveys

Staff from fishery resource offices in Ashland and La Crosse assisted the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) this spring with several walleye population surveys to estimate spawning populations of adult walleyes in Wisconsin lakes and collect fish for mercury testing from lakes in Northern Michigan. Walleye population estimates are used to set safe harvest levels, on which tribal harvest quotas are based.

Dave Wedan and Scott Yess of the La Crosse FRO and Frank Stone and Jonathan Pyatskowit from the Ashland FRO assisted in Northern Wisconsin this year. Weather conditions were fairly good during the ten-day spawning run. The team, composed of four GLIFWC boats, two Fish and Wildlife Service boats and a St. Croix Biology Department boat, tagged several thousand walleye. The majority of the fish were males in the 10- to 18-inch range.

Frank Stone, Ashland FRO
Scott Yess, La Crosse FRO
(Fiscal Year 2005; Vol. 3 No. 7)

-USFWS

Frank Stone and crew prepare their boat for a night of electrofishing for walleyes. Information gathered from these surveys will be used to set walleye harvest quotas in Northern Wisconsin. The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) requested assistance from the La Crosse and Ashland FRO's for the survey. Pictured are (left to right) Frank Stone (Ashland FRO); Lewis Plucinski and Shane Cramb (GLIFWC).

Technical Fisheries Committee Submits Recommended Lake Trout Harvest Limits for 2005

The Technical Fisheries Committee (TFC) met twice during the month of April to produce lake trout harvest limits for 2005 tribal commercial and state recreational fisheries in 1836 Treaty waters of lakes Superior, Michigan and Huron. Alpena FRO Project Leader Jerry McClain (TFC chair) and Treaty Fisheries Unit Leader Aaron Woldt, Modeling Subcommittee (MSC) co-chair, attended the meetings. On April 6, the TFC met to review preliminary harvest limits produced by the MSC and discuss lake trout population trends in the respective lake trout management units. On April 27 the committee approved the final harvest limits for the upcoming season. Using the most current and statistically valid assessment and harvest data available, the MSC uses Statistical Catch at Age Modeling to produce recommended safe harvest limits for the upcoming fishing season. McClain mailed the final harvest limit recommendations to the Parties on May 11. Interagency participation in the Modeling Sub-Committee and the Technical Fisheries Committee ensures cooperation and agreement for establishment of safe harvest limits for lake trout.

Jerry McClain, Alpena FRO
(Fiscal Year 2005; Vol. 3 No. 7)

Lake Sturgeon Restoration Program is Off and Running!

Spring has sprung on the rivers in Central Wisconsin and that means lake sturgeon are making their annual spawning runs in the larger tributaries of Lake Winnebago and the Mississippi and Wisconsin River systems. Genoa NFH is once again collecting gametes from this ancient species for restoration efforts across the Upper Midwest. Crews from Genoa began collecting fertilized eggs in mid-April as part of a cooperative project involving the Fish and Wildlife Service, Menominee Nation of Wisconsin and Wisconsin DNR to restore lake sturgeon populations on the Menominee Reservation in Northeast Wisconsin.

This long-term restoration program, which has been in place since the mid 1990s, has produced thousands of fingerling lake sturgeon for tribal waters. In addition to this program, Genoa NFH produces tens of thousands of fingerling lake sturgeon annually for restoration programs in Northern Minnesota and Missouri involving multiple state and tribal cooperators.

Roger Gordon, Genoa NFH
(Fiscal Year 2005; Vol. 3 No. 6)

-USFWS

Roger Gordon (center) from the Genoa NFH collects lake sturgeon eggs in a project involving the Menominee Nation and Wisconsin DNR.

Service Biologist Co-Chairs Modeling Subcommittee Meeting for 1836 Treaty Waters

Biologist Aaron Woldt from the Alpena FRO and Shawn Sitar from the Michigan DNR co-chaired the March meeting of the Modeling Subcommittee (MSC) of the 1836 Treaty Waters group's Technical Fisheries Committee (TFC). The primary focus of this meeting was to generate preliminary 2005 harvest limits for lake trout in 1836 Treaty waters of lakes Huron, Superior and Michigan. As stipulated in the 2000 Consent Decree, preliminary lake trout harvest numbers must be calculated by the MSC, reviewed by the TFC, and presented to the parties to the decree by March 31 each year.

Woldt and Ji He of the Michigan DNR presented an update of the status of Northern Lake Huron (MH-1 and MH-2) lake trout stock assessment models, model diagnostic output, and preliminary 2005 lake trout harvest limits. Lake Huron preliminary lake trout harvest limits for 2005 increased slightly from 2004 levels due to continued lower than target total mortality rates and increases in stock biomass due to decreasing mortality. In 2005, the Lake Huron models were updated to include time varying weight at age and time varying maturity at age to capture recent shifts in these parameters in Lake Huron lake trout populations. These preliminary limits were presented to the TFC for review on April 6.

The 2000 Consent Decree is a 20-year fishery allocation agreement for 1836 Treaty waters signed by the State of Michigan, United States, Bay Mills Indian Community, Sault Ste. Marie Tribe of Chippewa Indians, Grand Traverse Band of Ottawa and Chippewa Indians, Little River Band of Ottawa Indians, and Little Traverse Bay Bands of Odawa Indians. The MSC computed final lake trout harvest numbers and presented them to the parties by April 30, as stipulated in the Decree.

Aaron Woldt, Alpena FRO
(Fiscal Year 2005; Vol. 3 No. 6)

Announcements Mailed for 2005 Tribal Wildlife Grant and Tribal Landowner Incentive Grant Programs

The Ashland FRO mailed an announcement to all of its tribal contacts alerting them to the opening of the 2005 Tribal Wildlife Grant (TWG) and Tribal Landowner Incentive (TLIP) Grant programs. Our intent is to insure that tribal resource managers and biologists are aware of this resource funding opportunity and to remind them to contact the Ashland FRO for any technical assistance they may require.

The TWG and TLIP programs will provide new funding opportunities to tribes for actions and activities that protect and restore habitats benefiting fish and wildlife species of tribal significance. These grant programs also support the efforts of tribal governments to develop or augment the capacity to manage, conserve, or protect fish and wildlife species of concern through the provision of funding and technical support.

Frank Stone, Ashland FRO
(Fiscal Year 2005; Vol. 3 No. 6)

Regional and Washington Offices Recognize Menominee Tribal Biologist

For his efforts to restore lake sturgeon on the Menominee Reservation, Don Reiter, fish and wildlife biologist for the Menominee Indian Tribe of Wisconsin, received special recognition at the opening ceremony for the Menominee Tribe's first sturgeon fishery. The opening of the sturgeon fishery on February 5 marked the first time in more than 50 years that Menominee people could once again harvest lake sturgeon from their waters. Ann Runstrom, fishery biologist from the La Crosse FRO, presented Reiter an award signed by Regional Director Robyn Thorson and Hannibal Bolton, chief of Fish and Wildlife Management and Habitat Restoration in the national Division of Fisheries and Habitat Conservation.

Reiter's skill at working cooperatively with individuals of varying interests helped to make the dream of restored sturgeon populations on the reservation a reality. The lake sturgeon population in Legend Lake was established through the efforts of a team of biologists from the Menominee Tribe, Wisconsin DNR, Fish and Wildlife Service, University of Wisconsin Sea Grant Institute, and the U.S. Geological Survey. Reiter's willingness and friendly nature made it easy for this diverse group to put aside differences and work toward the good of the resource and the people. The efforts of this group working together made it possible to reach the goal of allowing tribal harvest 15 years earlier than anticipated.

Ann Runstrom, La Crosse FRO (Fiscal Year 2005; Vol. 3 No. 5)

-Menominee Nation News

Ann Runstrom presents Fish and Wildlife Biologist Don Reiter , from the Menominee Indian Tribe of Wisconsin, with a special recognition for his efforts to restore lake sturgeon on the Menominee Reservation.

Menominee Tribe Harvests Sturgeon for First Time in More than 50 Years

A dream of several tribal elders came true on February 5 when the Menominee Indian Tribe of Wisconsin opened its first regulated sturgeon fishery on Legend Lake. During the past decade, La Crosse FRO biologists have been working with the Menominee Tribe, Wisconsin DNR, and Genoa NFH to restore lake sturgeon on the reservation. This multi-agency team reviewed the assessment data from 2003 and 2004 and supported a proposal to open a limited fishery to tribal members in the winter and spring of 2005, several years earlier than anticipated. The winter season was open from February 5-20 and a spring season will be open April 9-24. Regulations include restricting gear to spears or hook and line, minimum harvest size of 36 inches, and no use of artificial lights during the winter season. Participants were required to apply for a sturgeon tag with one tag issued per person and a maximum of 100 tags issued. Those who harvest fish are required to register with the Menominee Department of Conservation.

The Menominee people once relied heavily on lake sturgeon as an important food source, and the importance of the lake sturgeon as a Menominee totem remains today. Lake sturgeon were extirpated from the Menominee Indian Reservation in Northeast Wisconsin during the 1950s, and sturgeon have been absent from the diet of Menominee Tribal members since that time, with the exception of a small number of ceremonial fish provided to the tribe by the Wisconsin DNR each year since 1995.

The opening of the fishery is a result of the willingness of individuals to work together for the benefit of the resource and the people. The multi-agency team began stocking Legend Lake in 1994. Annual stocking rates and size of fish varied with availability, and 56,000 lake sturgeon have been stocked through 2004. Harvest success during the winter fishery was low (total catch=0), but participants began to learn the habits of the fish and best use of their gear. In hopes of spreading knowledge, Menominee Department of Conservation searched unsuccessfully for living elders that had experience harvesting lake sturgeon. Hopes are high that the open water season in April will be more productive.

Ann Runstrom, La Crosse FRO (Fiscal Year 2005; Vol. 3 No. 5)

-USFWS by Duane Raver

Lake Sturgeon

Alpena Staff Make Experimental Gill Net Repairs

Biologists Scott Koproski and Adam Kowalski from the Alpena FRO repaired experimental assessment gill nets used during the 2004 fishery independent lake whitefish survey in 1836 Treaty waters. The experimental gill nets do not have lead weights secured to the net frame as standard bottom-set gill nets do, and have a three foot dropper line from the bottom of the net frame tied to a continuous piece of lead core line. The dropper lines are tied every 18 inches between the frame and the lead core line. This results in a "mesh free" area at the bottom three feet of the water column which helps reduce lake trout bycatch, since trout typically associate themselves with the lake bottom.

During the 2004 fishery independent lake whitefish surveys, biologists fished the standard and experimental assessment nets simultaneously. Preliminary results indicate that lake whitefish catch per unit of efforts (CPEs) increased slightly using the experimental assessment nets, and lake trout CPEs dropped significantly. Another gang of experimental assessment nets will be built prior to the 2005 fishery independent lake whitefish survey and fished to further compare catch rates in each net type. Maintenance of gill nets and other equipment is performed annually to ensure assessment activities can be completed.

Scott Koproski, Alpena FRO (Fiscal Year 2005; Vol. 3 No. 5)

-USFWS photo by Aaron Woldt

Gill nets are used for fishery surveys for lake whitefish. Alpena FRO biologists Scott Koproski and Adam Kowalski began repairing experimental assessment gill nets which will be used during the 2005 fishery independent lake whitefish survey in 1836 Treaty waters.

Bad River Natural Resources Department Holds Open House

The Bad River Natural Resources Department hosted an open house in January to discuss environmental projects, program areas, and work being done on the reservation by the department and with area partners. Ashland FRO presented posters describing work the Fish and Wildlife Service conducts to monitor lake sturgeon populations in the Bad River. One poster described assessment activities that characterize the lake sturgeon spawning population, including capture methods, population estimates, aging information, and tagging. The second poster described the collaborative effort between the FRO, U.S. Geological Survey, and the tribe to characterize juvenile nursery habitat in the lower 4.4 miles of the river through the use of sonar, trawl data, aerial photography, and geographic information systems. Agency staff answered questions regarding the display and followed up on a request for additional information.

Jonathan Pyatskowit,AshlandFRO (Fiscal Year 2005; Vol. 3 No. 5)

Joint Fishery Assessment Steering Committee Meets at the Great Lakes Indian Fish & Wildlife Commission

Frank Stone from the Ashland FRO participated in an annual meeting of the Joint Fishery Assessment Steering Committee held at the Great Lakes Indian Fish & Wildlife Commission. Representatives from the commission, Wisconsin DNR, Bureau of Indian Affairs, and Red Cliff and Bad River Indian Reservations discussed inland walleye population surveys from 2004 that were funded in part by the steering committee. Assessment data collected from spring, summer, and fall surveys were presented, as well as 2005 assignments and the projected 2005 budget.

The data collected from the 416 surveys reflect the lake's recruitment values. These values are combined to determine the number of adult walleye that can be safely harvested.

Frank Stone, Ashland FRO (Fiscal Year 2005; Vol. 3 No. 5)

-USFWS

A dorsal spine is collected from a walleye. Walleye sampling in northern Wisconsin is a critical component to estimate adult populations, determine recruitment, and establish harvest levels.

Ashland Fishery Resources Office can now read Oxytetracycline Marks

Thanks to a recent Tribal Wild life Grant (TWG) that was awarded to the Keweenaw Bay Indian Community (KBIC), the Ashland Fishery Resources Office (FRO) and the Tribe will be working together to help determine the contribution of hatchery reared brook trout in KBIC waters. KBIC recently purchased equipment required to read oxytetracycline (OTC) marks in the otolith of fish. This compound microscope and ultraviolet light system will be housed at the Ashland FRO. Our staff will read the samples provided by the KBIC Natural Resources Department and will also be able to use this equipment for other programs.

The Ashland FRO and the KBIC Natural Resources Department have been working together in the marking of brook trout with OTC since 1998. A means of evaluating stocked fish is an important facet of fishery management. Now that the OTC reading equipment is available, the KBIC Natural Resources Department will have a better means of estimating the survival of stocked brook trout.

Glenn Miller, Jonathan Pyatskowit, and Frank Stone recently traveled to the Wisconsin Department of Natural Resources (DNR) office in Spooner, Wisconsin for OTC training. Technician Gene Hudsonmiller (Wisconsin DNR) presented our staff with the techniques needed to prepare otoliths and read the OTC marks.

Frank Stone, Ashland FRO
(Fiscal Year 2005; Vol. 3 No. 4)

-USFWS

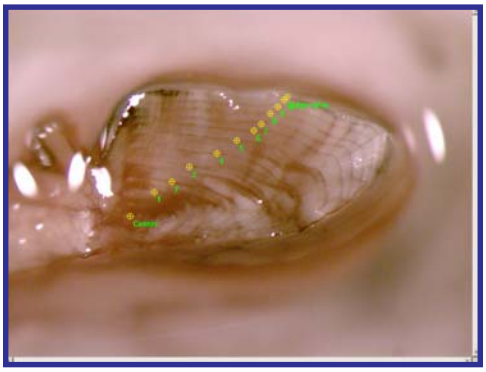
The Keweenaw Bay Indian Community purchased this equipment for reading oxytetracycline marks on bony structures (otoliths) of fish. Personnel from the Ashland Fishery Resources Office were trained to use this specialized equipment as an important fishery management tool.

Lake Whitefish Age Determination

Biologist Scott Koproski fin ished aging lake whitefish otoliths collected during the 2004 fishery independent lake whitefish survey. The Alpena Fishery Resources Office (FRO) is responsible for assessing lake whitefish populations in two management units (WFH-04 and WFH-05) in Northern Lake Huron. The study sampling design was established by the Modeling Subcommittee (MSC) of the Technical Fisheries Committee (TFC). The MSC is responsible for developing lake whitefish harvest limits in 1836 Treaty Ceded Waters.

In 2004, the Alpena FRO collected 128 lake whitefish during assessment activities in Lake Huron lake whitefish management units WFH-04 and WFH-05. Scales and otoliths were collected from all lake whitefish sampled. Koproski used the "crack and burn" technique to identify annuli present in the otoliths. This technique allows researchers to differentiate two distinct growth patterns within the structure: broad summer growth and narrow winter growth. By counting the bands of winter growth, age estimates can be obtained from the otoliths. Ages, along with other biological parameters, are used in the statistical catch at age models used by the MSC to develop safe harvest limits in 1836 Treaty Waters. The Alpena FRO is fulfilling the Fish and Wildlife Service's obligations as a signatory to the 2000 Consent Decree by serving as members of the Technical Fisheries Committee and the Modeling Subcommittee, and by assessing lake whitefish populations in 1836 Treaty ceded waters.

Scott Koproski, Alpena FRO
(Fiscal Year 2005; Vol. 3 No. 4)



-USFWS photo by Scott Koproski

A bony structure in whitefish (otolith) is being examined to determine age . The growth rings (annuli) are marked on this sample.The process is similar to counting growth rings on a tree stump. Biologist Scott Koproski aged lake whitefish otoliths collected during the 2004 fishery independent lake whitefish survey in Lake Huron. The Alpena Fishery Resources Office is responsible for assessing lake whitefish populations in two management units in Northern Lake Huron.

Technical Fisheries Committee finalizes Lake Whitefish Harvest

The Technical Fisheries Committee (TFC) met in Roscommon, Michigan in December to finalize lake whitefish harvest limits for 2005. Model generated harvest limits, based on the most current biological and harvest data, are produced annually by the TFC's Modeling Subcommittee (MSC) for management units where fisheries are shared between the five Chippewa Ottawa Resource Authority (CORA) tribes and the State of Michigan in 1836 Treaty waters of lakes Superior, Michigan, and Huron. The Consent Decree requires the TFC to provide these final harvest limits to the Parties by December 1 each year. In management units where the whitefish fishery is reserved for the CORA tribes, harvest regulation guidelines (HRG) are established by the tribes according to terms of a Tribal Management Plan. Final HRG's will be provided to the Parties once CORA has established them. Alpena Fishery Resources Office (FRO) Project Leader Jerry McClain (TFC Chair) and Treaty Fisheries Unit Leader Aaron Woldt (MSC co-Chair) attended the meeting. McClain mailed the final harvest limit recommendations to the Parties on December 10.

Jerry McClain, Alpena FRO
(Fiscal Year 2005; Vol. 3 No. 3)

-USFWS photo by Aaron Woldt

Alpena Fishery Resources Office conducts whitefish assessments as part of a data set which is used to determine safe lake whitefish harvest levels in management units where fisheries are shared between the five Chippewa Ottawa Resource Authority tribes and the State of Michigan. Pictured is Aaron Woldt.

Lake Superior Angler's Creel Lake Trout Scales Read

The Ashland Fishery Resources Office (FRO) has completed ageing a set of lake trout scales collected from anglers at various creel check points on Lake Superior. The creel is run by the Marquette Fisheries Station, Michigan Department of Natural Resources (DNR). Scales were collected in both 1836 and 1842 treaty waters of Lake Superior. The information is used in conjunction with the biological data in models regulating harvest of lake trout. About 1,000 lake trout scales from the 2004 creel were read. This was the fourth year the Ashland FRO has assisted with scale reading for the Michigan DNR. Data collected from the creels and surveys will ensure that biological information is available for restoration programs in Lake Superior.

Glenn Miller, Ashland FRO
(Fiscal Year 2005; Vol. 3 No. 3)

Red Lake Walleye Restoration Effort

The Ashland Fishery Resources Office (FRO) continues to work with the Red Lake Band of Chippewa, Minnesota Department of Natural Resources (DNR), Bureau of Indian Affairs, and the University of Minnesota to restore a naturally spawning population of walleye in Red Lake in Northern Minnesota. During a December meeting, Frank Stone met with the Red Lake Task Force Committee to discuss the walleye restoration program and performance indicators of this long term restoration effort.

Frank also presented additional information for an internet web page that he developed for the Red Lake Recovery program. The web page will highlight the history, decline, and recovery of this important resource. The proposed web page will contain several links; Resource Fact Sheet, Progress Reports, Recovery and Fishery Assessment Data, Media and Agency Links, Image Library, and a Tribal Profile.

Several additional topics were also discussed at this meeting: The Minnesota DNR and the Red Lake Nation are focusing on selecting one of several different harvest models to be used for the Red Lake walleye fishery; The Red Lake DNR is reviewing a questionaire that will attempt to define preferred harvest options/ methods by the Tribe; The Minnesota DNR and the Red Lake Band will continue with an experimental walleye fry stocking next spring (10 million) to study fry survival rates.

Frank Stone, Ashland FRO
(Fiscal Year 2005; Vol. 3 No. 3)

Lake Whitefish Survey in Northern Lake Michigan

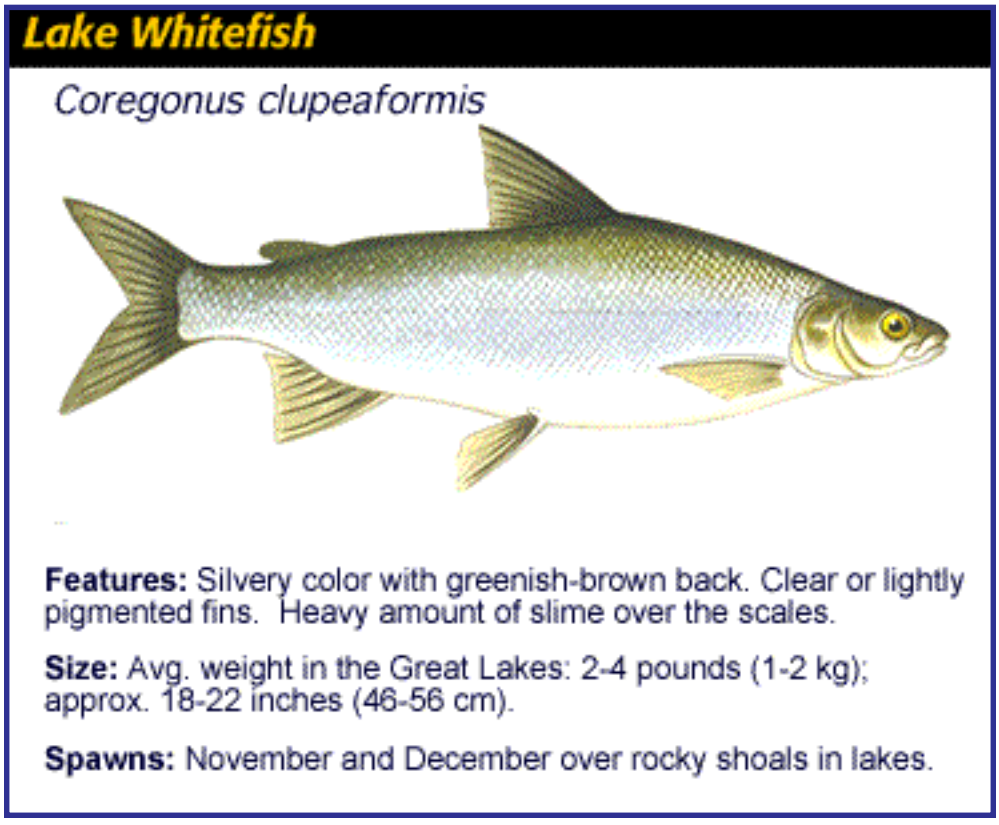
The Green Bay Fishery Resources Office (FRO) completed an annual lake whitefish survey in Whitefish Management Unit 1 (WFM-01) of Lake Michigan near Escanaba, Michigan. The survey utilized graded mesh gill-nets, ranging between 2" and 6" mesh, to sample lake whitefish, lake trout, and other species. Biologists collected information on relative abundance, size and age structure, reproductive potential, and invasive sea lamprey induced mortality. This information is used to manage the lake whitefish and lake trout fisheries in Great Lakes waters within the jurisdiction of the Consent Decree of 2000 (Decree). The Decree outlines a cooperative management program between the Fish and Wildlife Service, five Native American Tribes, and the Michigan Department of Natural Resources to set harvest guidelines for parts of lakes Michigan, Superior, and Huron. The information collected from this survey is combined with data from other whitefish management units collected by biologists from cooperative agencies. An inter-agency team of biologists then use statistical catch-at-age models to assess the status of fisheries stocks and project safe harvest quotas that protect the fishery from over-exploitation.

Dale Hanson, Green Bay FRO (Fiscal Year 2005; Vol. 3 No. 2)

Fish and Wildlife Service Biologist attends Modeling Sub-Committee meeting

John Netto attended the fall meeting of the Modeling Sub-Committee (MSC) of the Technical Fisheries Committee to the 2000 Consent Decree in Roscommon, Michigan. At this meeting, the MSC reviewed the status of the lake whitefish models and discussed other business related to the stock assessment process in the treaty waters. John presented the modeling results for whitefish management unit 2 (WFM-02) in Lake Michigan, the estimates of abundance and fishing mortality and the calculated quota for 2005, and the results of diagnostic procedures performed on the model including an automated procedure for running retrospective analyses he developed for all of the whitefish models. Every year, the Modeling Sub-Committee meets prior to setting white fish harvest limits to allow peer review and discussion of the data analysis and modeling that is required to set a quota each year.

John Netto, Green Bay FRO (Fiscal Year 2005; Vol. 3 No. 2)



Fall Walleye Surveys with the Great Lakes Indian Fish & Wildlife Commission

Frank Stone from the Ashland Fishery Resources Office (FRO) finished an eight-week project assisting the Great Lakes Indian Fish and Wildlife Commission in collecting walleye using a boat electrofishing system. The objectives of these surveys are to estimate relative abundance of young-of-the-year walleye in several lakes of northern Wisconsin and Michigan. The data from the surveys will be used in conjunction with spring population estimates, to set walleye safe harvest levels for the 2005 spring spearing season. A total of 31 lakes were surveyed during this period.

Frank Stone, Ashland FRO
(Fiscal Year 2005; Vol. 3 No. 1)

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Great Lakes Indian Fish and Wildlife Commission staff Dale Corbine (left) and Lewis Plucinski prepare to collect walleye using an electrofishing system. Ashland FRO assisted in these surveys to estimate the relative abundance of young-of-the-year walleye in several lakes in northern Wisconsin and Michigan.

White Earth Department of Natural Resources Fishery Survey

Fishery surveys are always exciting and the survey conducted on Tea Cracker Lake was no exception. Tea Cracker is a small lake which borders the White Earth Reservation and Tamarac National Wildlife Refuge, two management areas which the La Crosse Fishery Resources Office (FRO) provides assistance. Randy Zortman, White Earth Department of Natural Resources (DNR), requested assistance from Scott Yess, La Crosse FRO, on this fishery survey. Randy and his crew have a very active walleye management program on the Reservation and Tea Cracker is one of the lakes currently being stocked with walleye. Tea Cracker has had some tremendous years providing anglers with many hours of exceptional fishing; however, this lake winterkilled in 2003 so it is currently on the rebound. The survey indicated low to moderate numbers of one and two year old fish so it will take a couple more years to provide good fishing. It is worth putting the effort in on Tea Cracker, Zortman explains, because it will have several good years before a major winterkill occurs and they have to start over. This fishery survey data will be used to make management recommendations regarding the walleye fishery in Tea Cracker Lake.

Walleye fingerlings are normally stocked in Tea Cracker from grow out ponds that Randy and his crew harvest each fall. This year the lake received hundreds of walleye fingerlings which hopefully will provide a recreational fishery in two years. The White Earth DNR manages over 40 lakes on the Reservation for walleye which are some of the best walleye producers in Northwest Minnesota.

Scott Yess, La Crosse FRO
(Fiscal Year 2005; Vol. 3 No. 1)

Coasters on the Border

Biologist Steve Redman from the Iron River National Fish Hatchery (NFH) stocked coaster brook trout with assistance from personnel of the Grand Portage Tribal Resources Department. The Pigeon River, which is a tributary to Lake Superior on the United States/Canada border, was stocked with 20,000, 5 inch coaster brook trout reared at the Genoa NFH. All fish were marked with oxytetracycline dye in addition to a fin clip at the hatchery before stocking. This will allow biologists to monitor the status of the coasters in these habitats. This multiple year stocking event, which is coordinated between the Grand Portage Indian Community and the Fish and Wildlife Service, was established to fulfill the rehabilitation plan for Lake Superior coaster brook trout. The combined effort has led to continued monitoring of coaster brook trout status, distribution, movement, and the abundance of re-introduced fish. In addition to these accomplishments, the Tribe has also acquired additional land, improved stream habitats, and removed barriers that would impact coaster rehabilitation.

Steve Redman, Iron River NFH
(Fiscal Year 2005; Vol. 3 No. 1)

Fish and Wildlife Service Biologist Co-Chairs Modeling Subcommittee Meeting for 1836 Treaty Waters

Biologist Aaron Woldt from the Alpena Fishery Resources Office (FRO) attended and co-chaired the September meeting of the Modeling Subcommittee (MSC) of the Technical Fisheries Committee (TFC). The primary focus of this meeting is to generate preliminary 2005 harvest limits for lake whitefish management units in 1836 Treaty waters of lakes Huron, Superior, and Michigan. As stipulated in the 2000 Consent Decree, preliminary lake whitefish harvest limits must be calculated by the MSC, reviewed by the TFC, and presented to the parties to the decree by November 1 each year.

Preliminary lake whitefish harvest limits will be presented to the TFC for review on October 6. The MSC will complete final lake whitefish harvest limits and present them to the TFC at its December 1 meeting. Harvest limits, when reviewed by the parties and finalized, will become binding 2005 lake whitefish harvest limits for 1836 Treaty waters. These harvest limits will allow lake whitefish fisheries to be executed while still protecting the biological integrity of the lake whitefish stocks. This outcome is consistent with the Fish and Wildlife Service's goal of building and maintaining self-sustaining populations of native fish species while meeting the needs of tribal communities under the "Aquatic Species Conservation and Management" and "Cooperation with Native Americans" priorities of the Fisheries Program Vision for the Future.

Aaron Woldt, Alpena FRO
(Fiscal Year 2004; Vol. 2 No. 8)

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Jerry McClain holds a lake whitefish captured during a fishery assessment. Alpena Fishery Resources Office provides some of the data which is used in an analysis to develop a harvest limit for this native species in 1836 Treaty waters of the Great Lakes.

Chippewa Ottawa Resource Authority Walleye Assessment in 1836 Treaty Waters

Biologist Scott Koproski assisted the Chippewa Ottawa Resource Authority (CORA) with their annual juvenile walleye assessment of the St. Marys River near Sault Ste. Marie, Michigan. Using the Alpena Fishery Resources Office's (FRO) electrofishing vessel, Koproski and two CORA staff sampled four locations in the St. Marys River system (Waiska Bay, Lake Nicolet, Lake George, Sugar Island Side Channel) over four nights. The objective of this work is to determine the percent contribution of hatchery reared walleye to the St. Marys River walleye population and to index juvenile walleye abundance.

To differentiate hatchery produced walleyes, fish are immersed in oxytetracycline (OTC) prior to release. OTC leaves a mark on calcified structures like otoliths and vertebrae that can be detected in the lab. Data collected will also be used to determine appropriate stocking levels and stocking locations for this system. Staff from the Alpena FRO has been assisting CORA with this walleye assessment for the past 12 years.

Scott Koproski, Alpena FRO
(Fiscal Year 2004; Vol. 2 No. 8)

Ashland Fishery Resources Office takes on Fall Walleye Surveys

Frank Stone from the Ashland Fishery Resources Office (FRO) assisted the Great Lakes Indian Fish and Wildlife Commission in determining recruitment levels of juvenal walleye this fall. The objectives of these surveys are to estimate relative abundance of young-of-the-year walleye in several lakes of northern Wisconsin and Michigan. The data will be used in conjunction with spring population estimates to set walleye safe harvest levels for the 2005 spring spearing season. Frank will be conducting fishery surveys on a total of 32 lakes over an eight-week period.

The sampling effort takes place at night, when walleye activity is the highest and catch efficiency is maximized. Using a boat electrofishing system, fish collection is relatively fast and efficient. Both length data and scale samples are collected. Catch per unit effort values are calculated by dividing the number of fish collected by the total minutes of effort. These data reflect the lake's recruitment values and are combined with the spring population surveys to yield information needed to help determine a safe harvest limit for adult walleye.

Frank Stone, Ashland FRO
(Fiscal Year 2004; Vol. 2 No. 8)

Lake Sturgeon Assessment on the St. Louis River

The restoration of lake sturgeon to historic areas is a high priority to the people of the Fond du Lac Band of Lake Superior Chippewa. Using set lines, gill nets, and Windemere trap nets, the Ashland Fishery Resources Office (FRO) concluded a five week project assisting the Fond du Lac Band in assessing the recruitment of these fish. Several river sections within a 20 mile section of the Upper St. Louis River, upstream of Cloquet, Minnesota, were sampled for sturgeon. This study was first conducted in 2001, but it needs to be repeated periodically to determine the survival and recruitment from four years of stocking (1998, 1999, 2000, and 2003).

The primary objective of this study was to determine if lake sturgeon stocked as eyed eggs have recruited into this fishery. The secondary objective was to gather length and growth data for channel catfish in the Upper St. Louis River. Although no sturgeon were collected, length and age data for channel catfish were obtained as a result of this survey. Our study has indicated that considerably more sturgeon eggs will need to be stocked before a detectable population of fish will be found.

Frank Stone, Ashland FRO
(Fiscal Year 2004; Vol. 2 No. 7)

-USFWS

Frank Stone (left) from the Ashland FRO and Terry Perrault from the Fond du Lac Band of Lake Superior Chippewa are ready for a lake sturgeon assessment on the St. Louis River.

Lake Whitefish Surveys in Eastern Lake Michigan

Green Bay Fishery Resources Office (FRO) conducted gill-net assessments of lake whitefish populations within the 1836 ceded territory waters of Lake Michigan. These surveys were conducted in June near the port towns of Frankfort and Elk Rapids, Michigan. The work was part of a larger multi-agency effort to obtain biological data on lake whitefish populations. Over 12,000 feet of gill-net was set within both general survey locations to collect data on relative abundance by age-class, length at age, juvenile recruitment, and sea lamprey wounding rates of lake whitefish and other species in the survey area. These data are used in stock assessment models from which harvest limits in all shared lake whitefish management units are derived.

Dale Hanson, Green Bay FRO
(Fiscal Year 2004; Vol. 2 No. 7)

2004 Fishery Lake Whitefish Survey on Lake Huron

From August 2 to August 30, staff from the Alpena Fishery Resources Office (FRO) completed a fishery lake whitefish survey in 1836 Treaty waters of northern Lake Huron. Staff included Treaty Unit Coordinator Aaron Woldt; biologists Adam Kowalski, Scott Koproski, Anjie Bowen, and Susan Wells; and Project Leader Jerry McClain. The goal of this survey was to collect fishery abundance and biological data for lake whitefish stocks in treaty waters. The data is used in statistical-catch-at-age population models that are updated annually to determine harvest regulation guidelines for tribal commercial fishers in 1836 Treaty waters. The Modeling Subcommittee of the Technical Fisheries Committee annually collects data and conducts model runs to determine lake whitefish harvest guidelines for 5 management units in Northern Lake Huron.

In August, using the Alpena FRO's 30' research vessel and staff, 18 overnight, variable mesh gill net sets were conducted at randomly selected sites between Alpena and Hammond Bay. Standard bottom set survey nets as well as legged nets were set. All lake whitefish and non-target fish collected were measured for length, weighed, checked for lamprey wounds, sexed, assessed for maturity and visceral fat content, and sampled for ageing.

In 2004 the Alpena FRO evaluated; 1) whether legged nets increased lake whitefish catch rates and decreased lake trout by catch, and; 2) whether executing the survey in July and August affected lake whitefish and lake trout catch rates. In previous years, this survey was conducted

in mid-May to mid-June. Preliminary analyses show that lake whitefish catch rates were similar between bottom-set and legged nets; however, lake trout catch rates were significantly lower in legged nets than in bottom sets. Average lake whitefish and lake trout catch rates showed no significant differences between June (N=6 sets), July (N=8), and August (N=14). This survey will continue annually and be tailored to meet needs identified by the Modeling sub-committee. All data from this survey will be compiled, maintained, and analyzed at the Alpena FRO.

Data collected in this survey will improve the accuracy of current population models being used to set lake whitefish harvest guidelines in 1836 Treaty waters of Northern Lake Huron.

Aaron Woldt, Alpena FRO
(Fiscal Year 2004; Vol. 2 No. 7)

Red Lake Forage Fish Numbers continue to Decline

In cooperation with the Red Lake Band of Chippewa and the Minnesota Department of Natural Resources (DNR), Ashland Fishery Resources Office (FRO) continued bottom trawling to monitor abundance of juvenile walleye and forage fish in the Upper and Lower Red Lakes, Minnesota. In accordance with the Red Lake Walleye Restoration Plan, this monitoring is used by the tribe and Minnesota DNR to aid in the assessment of walleye recruitment, the success of walleye stocking, and the status of forage fish stocks for supporting walleye (walleye carrying capacity).

A total of 60 tows of 5-minute duration were completed along index transects on August 16-17. Young-of-the year catches of spottail shiner, freshwater drum, bluegill, and black crappie were observed to have declined significantly from a previous assessment. Catches of adult spottail and emerald shiners, trout-perch, and juvenile freshwater drum were also observed to have declined significantly. Species diversity included a few juvenile whitefish, and these were observed to be rare in catches. Year class strength of yellow perch continues to be good as indicated by abundant catches, possibly enhanced from the stocking of 10 million walleye fry last spring. Results of tribal seine hauls indicated a good natural recruitment from the 1999 walleye stocking. Since 1999, approximately 129 million walleye fry have been stocked in the Red Lakes. The Red Lake walleye fishery is scheduled to reopen in spring, 2006.

Gary Czypinski, Ashland FRO
(Fiscal Year 2004; Vol. 2 No. 7)

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Gary Czypinski from the Ashland FRO adjusts trawling equipment. Bottom trawling in Red Lake indicated a decline in forage fish abundance. In accordance with the Red Lake Walleye Restoration Plan, monitoring is used to aid in the assessment of walleye recruitment, the success of walleye stocking, and the status of forage fish stocks for supporting walleye.

Stock Assessment of Lake Trout in 1842 Treaty Waters of Lake Superior

Biologists from the Great Lakes Indian Fish and Wildlife Commission, Red Cliff Tribal Fisheries Department, Keweenaw Bay Indian Community, and Michigan Department of Natural Resources have been developing stock assessment models to estimate the abundance of wild lake trout in the 1842 treaty waters of Lake Superior. The Green Bay Fishery Resources Office (FRO) assisted with this process and recently estimated the sea lamprey mortality estimates for modeled areas from data collected by these agencies. The results of the modeling effort will be used to assess the health of the native aquatic populations and assist with managing the lake trout fisheries in these waters.

John Netto, Green Bay FRO
(Fiscal Year 2004; Vol. 2 No. 7)

Keweenaw Bay Brook Trout get Oxytetracycline Markings

Frank Stone from the Ashland Fishery Resources Office (FRO) recently completed a brook trout marking project at the Keweenaw Bay Indian Community Fish Hatchery. A means of evaluating stocked hatchery reared fish (regardless of life stages) is an important facet of fishery management. However, the actual contributions that stocked fish make to a fishery are often unknown. The information gained from this project will give fishery managers a better means of estimating the survival of stocked brook trout fingerlings.

The treatment procedure with oxytetracycline (OTC) involves keeping the fish in a small holding tank containing 700 parts per

million (ppm) of OTC for several hours. During the treatment period, the OTC is incorporated into the bony structures of the fish. When these structures (otolith) are viewed using a microscope and ultraviolet light, the presence of an OTC mark will be noted as a yellow-gold band within the otolith. The use of OTC will hopefully serve as an inexpensive fish marking tool that will allow future assessment efforts to verify the recruitment levels of brook trout that originated from hatchery programs.
Frank Stone, Ashland FRO
(Fiscal Year 2004; Vol. 2 No. 7)

Green Bay Fishery Resources Office assists with Forest County Potawatomi Stream Surveys

The Green Bay Fishery Resources Office (FRO) worked cooperatively with the Forest County Potawatomi to perform stream electroshocking surveys on Tribal land in Forest County, Wisconsin. Surveys were conducted during the summer of 2003 and 2004. The North Branch of the Oconto, Colburn Creek, Otter Creek, Newman Creek, and the Rat River were all sampled using a backpack electroshocking unit. In addition to collecting biological data that will be used by Tribal biologists to monitor streams, the surveys were intended to provide training for Tribal biologists. In the near future, Tribal biologists will perform the surveys independently.
Stewart Cogswell, Green Bay FRO
(Fiscal Year 2004; Vol. 2 No. 7)

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Nick Legler from the Green Bay FRO worked with Gretchen Watkins from the Forest County Potawatomi to perform stream electroshocking surveys on Tribal land.

Planning continues for a Tribal Fish Hatchery at the Grand Portage Reservation

The Fish and Wildlife Service has chosen a grant proposal from the Grand Portage Lake Superior Band of Chippewa for funding under the Tribal Wildlife Grants program. Part of the activities under this grant will be to construct a 20' by 40' fish hatchery facility that will be utilized as an egg incubation and fry rearing facility for walleye, coaster brook trout, and perhaps lake sturgeon. The hatchery will be located on an existing parking area near the shores of Lake Superior.

Frank Stone, Ashland Fishery Resources Office (FRO), traveled to the Grand Portage Reservation to discuss the Tribe's plans to construct this facility and to begin designing the floor plan for the hatchery. The design will include several egg hatching jars, circular rearing tanks, and a pumping system that will provide 200 gallons of water per minute. The facility will only be used during the spring and summer months. The intent of this project is to provide walleye and brook trout fingerlings for stocking in local waters.
Frank Stone, Ashland FRO
(Fiscal Year 2004; Vol. 2 No. 7)

New Office for the Bureau of Indian Affairs - Great Lakes Agency in Ashland, Wisconsin

Mark Dryer from the Ashland Fishery Resources Office (FRO) attended the dedication of the new Bureau of Indian Affairs (BIA) office building for the Great Lakes Agency (Agency) in Ashland, Wisconsin. The Agency supports tribes and tribal organizations in Minnesota, Wisconsin, and Michigan. The new office will be staffed by nearly 100 BIA employees. Assistant Secretary for Indian Affairs, Dave Anderson, spoke at the dedication.
Mark Dryer, Ashland FRO
(Fiscal Year 2004; Vol. 2 No. 7)

-USFWS

The new Bureau of Indian Affairs office building for the Great Lakes Agency in Ashland, Wisconsin

Great Lakes - Big Rivers Region Fisheries Field Offices

National Fish Hatcheries

The Region's National Fish Hatcheries primarily focus on native fish restoration/ rehabilitation by stocking fish and eggs, such as pallid and lake sturgeon and by developing and maintaining brood stocks of selected fish strains, such as lake trout and brook trout. Hatcheries also provide technical assistance to other agencies, provide fish and eggs for research, stock rainbow trout in fulfillment of federal mitigation obligations and assist with recovery of native mussels and other native aquatic species.

Sea Lamprey Control Stations

Sea Lamprey Control Stations assess and control sea lamprey populations throughout the Great Lakes. The U.S. Department of State and Canadian Department of Fisheries and Oceans fund this program through the Great Lakes Fishery Commission.

Fishery Resources Offices

Fishery Resources Offices conduct assessments of fish populations to guide management decisions, perform key monitoring and control activities related to invasive, aquatic species; survey and evaluate aquatic habitats to identify restoration/rehabilitation opportunities; play a key role in targeting and implementing native fish and habitat restoration programs; work with private land owners, states, local governments and watershed organizations to complete aquatic habitat restoration projects under the Service's Partners for Fish and Wildlife and the Great Lakes Coastal Programs; provide coordination and technical assistance toward the management of interjurisdictional fisheries; maintain and operate several key interagency fisheries databases; provide technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydropower operation and re-licensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities. In other Regions of the Service, FRO's are also referrred to as Fish and Wildlife Management Assistance Offices.

Fish Health Center

The Fish Health Center provides specialized fish health evaluation and diagnostic services to federal, state, tribal and private hatcheries in the region; conducts extensive monitoring and evaluation of wild fish health throughout the region; examines and certifies the health of captive hatchery stocks; and, performs a wide range of special services helping to coordinate fishery program offices and partner organizations.

Great Lakes - Big Rivers Region Fisheries Field Offices

Great Lakes - Big Rivers Regional Fisheries Offices

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Region 3, Great Lakes/Big Rivers
Special Edition

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